STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission	:	
On its Own Motion	:	
	:	**18-NOI-01**
Notice of Inquiry Regarding	:	
Electric Vehicles	:	

Initial Comments of Elevate Energy

Elevate Energy submits these Comments in Response to the Illinois Commerce Commission's September 24, 2018 Notice of Inquiry. The Commission initiated this proceeding "as a vehicle for gathering information and opinions" related to the development of the electric vehicle (EV) marketplace. (NOI at 3). Elevate Energy looks forward to participating in this process and helping to shape our mutual understanding of the potential benefits of EVs and their place in relation to the electric grid.

Elevate Energy is a 120-employee 501(c)(3) not-for-profit corporation with a mission of *Smarter Energy Use for All*. We design and implement energy and water-saving programs that lower costs, protect the environment, and ensure the benefits of energy efficiency, demand response, and renewable energy reach those who need them most. We administer hourly pricing programs for both ComEd and Ameren that, as discussed below, connect participants to the benefits of the smart grid and can benefit EV owners who charge at low-demand times.

Variable electric rates are an important component of widespread electric vehicle adoption. The variable price of electricity can incentivize battery electric vehicle (BEV) and plug-in hybrid electric vehicle (PHEV) owners to charge at specific times, and two of Illinois' current variable electricity pricing programs are delivering savings for EV-owner participants.

The development of a robust electric vehicle market presents a major opportunity for Illinois businesses, communities, and consumers. Electric vehicles provide numerous benefits: the consumer advantages of reduced fuel costs, especially when optimizing off-peak charging rates to lower the overall cost of car ownership, increased innovation and economic development from the growth of EV-related technologies and services, environmental benefits from reduced emissions, and greater integration and advancement of smart grid capabilities.

Illinois is uniquely situated to maximize these benefits and become a national EV market leader. First, Illinois is currently the only state with hourly electricity pricing programs available to all ratepayers. These programs (ComEd's Hourly Pricing and Ameren Illinois Power Smart Pricing) empower EV owners to leverage off-peak

charging to significantly decrease the overall cost of car ownership, and they create an emerging market space for aiding technologies.

I. Hourly Pricing Programs in Illinois

A. Ameren Illinois Power Smart Pricing

Power Smart Pricing (PSP) is an hourly rate option for residential electricity customers in Ameren Illinois territory. On the program, the price participants pay varies from hour to hour and day to day according to the actual market price. Participants manage their electricity costs by taking simple actions to conserve energy during hours when prices are higher. Since program inception, PSP participants have experienced a savings of more than 15 percent off the electricity supply portion of their electricity bill, as compared with what they would have paid with Ameren's fixed-price rate.[1] Elevate Energy has served as the program administrator for Ameren's Power Smart Pricing program since the program began in 2007.

As of December 31, 2017, the program had 11,423 active participants. In 2017, the aggregate savings for Power Smart Pricing participants was $1,328,972 which represented an 8.3% total bill savings and 17.2% electricity supply savings compared to what the same bills would have been under the Ameren Illinois Basic Generation Service (BGS) fixed supply rate. The average dollar savings per participant in 2017 was $121.38. In addition, the average supply cost per kilowatt hour (kWh) for a Power Smart Pricing participant in 2017 was 4.44 cents/kWh compared with an average BGS supply cost of 5.36 cents/kWh.[2]

B. ComEd's Hourly Pricing Program

Elevate Energy also serves as the program administrator for ComEd's Hourly Pricing program. On the Hourly Pricing program, residential participants in ComEd territory pay the hourly, wholesale market price for electricity. Hourly Pricing participants have experienced a savings of more than 15 percent off the electricity supply portion of their electricity bill, as compared with what they would have paid with ComEd's fixed-price rate.[3]

There were 19,845 distinct accounts that billed on Hourly Pricing during 2017. Hourly Pricing participants saved an average of 17 percent on supply charges compared to the fixed-price rate, for an average savings of $109 and a grand annual total of $1,884,414. During 2017 the load weighted average BESH supply charge per kWh was 5.5 cents

[1] Savings percentage based on the electric supply section of the bill for January 2007 through October 2018.
[2] Elevate Energy, *Ameren Illinois Power Smart Pricing 2017 Annual Report* (Chicago: 2018), 3. Available in ICC Docket No. 11-0547, online at https://www.icc.illinois.gov/docket/files.aspx?no=11-0547&docId=270419.
[3] Savings percentage based on the electric supply section of the bill for January 2007 through October 2018.

per kWh. By comparison, ComEd's fixed-price rate had a load weighted average supply charge of 6.6 cents per kWh.[4]

II. Societal and Environmental Benefits

Since program inception, hourly rate pricing programs have produced the following societal and environmental benefits, shown in the infographics in Figure 1 and Figure 2.[5]

Figure 1

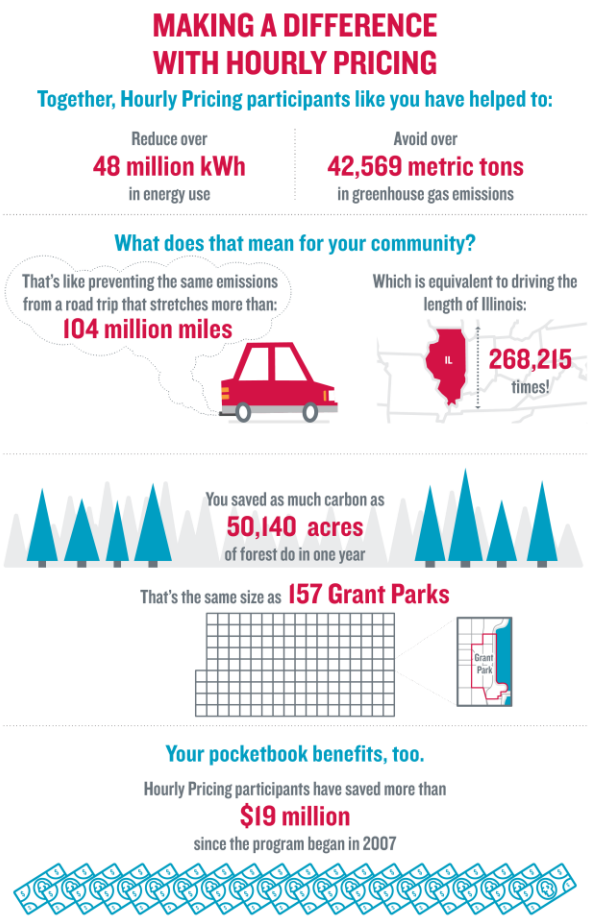
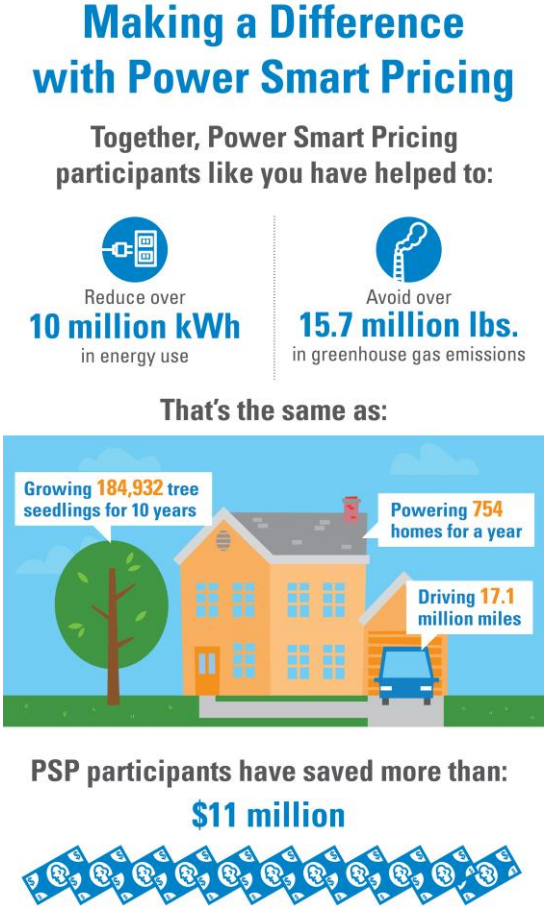


Figure 2



[4] Elevate Energy, *ComEd's Hourly Pricing Program 2017 Annual Report* (Chicago: 2018), 24. Available in ICC Docket No. 15-0602, online at https://www.icc.illinois.gov/docket/files.aspx?no=15-0602&docId=270438.

[5] Figures 1 and 2 are based on the Klos Energy Consulting Report analysis included in the Power Smart Pricing 2017 Annual Report Appendix (ICC Docket No.11-0547) available at https://www.icc.illinois.gov/docket/files.aspx?no=11-0547&docId=270419 and the Hourly Pricing 2017 Annual Report Appendix (ICC Docket No. 15-0602), available at https://www.icc.illinois.gov/docket/files.aspx?no=15-0602&docId=270439 .

III. Electric Vehicle Owners and Hourly Rate Options

An hourly rate pricing program is a good option for EV owners who can charge their vehicles during off-peak hours. For both hourly rate pricing programs, the lowest consecutive hourly rates tend to occur overnight between 1-5am. In 2017, the average hourly rate between 1-5 a.m. on the Power Smart Pricing program was $0.01975/kWh[6], compared to an average of 0.02852 cents/kWh for all other hours of the day. For the Hourly Pricing program, the average hourly rate between 1-5 a.m. was $0.01900/kWh, compared to $0.03048/kWh for all other others of the day.

EV owners could see additional benefits from an hourly rate pricing program if they can shift the use of other major electrical appliances to lower priced hours of the day. For example, Elevate Energy encourages hourly rate participants to do laundry and run the dishwasher during nights and weekends when electricity prices tend to be lower. During the summer, Elevate Energy also encourages participants to manage their air conditioning costs by precooling their home during hours when the price of electricity is low, then using less air conditioning during higher priced hours. An hourly rate pricing program might not be the best fit for an EV owner who is unable to shift their charging hours or other major electrical usage to lower priced times of the day.

IV. Rate Analysis

A recent rate analysis of ComEd's Hourly Pricing program (Figure 3) shows how EV owners can further benefit from the program, as compared to the ComEd's fixed-price rate, by charging during off peak times.

[6] The average price per kWh for the PSP program is based off the MISO day-ahead electricity prices in 2017 from 1-5am. Prices for ComEd's Hourly Pricing program are based on an average of PJM's hourly rates from 1-5am in 2017.

Figure 3

Average ComEd Household Annual Energy Supply Costs

	ComEd's Standard Fixed-Price Rate[1]	ComEd's Hourly Pricing Program[2]
Average Cost per kWh[3]	7.07 cents	6.18 cents
Total Annual Supply Cost (without EV charging)	$606.28	**$529.75**

Additional EV Charging Costs

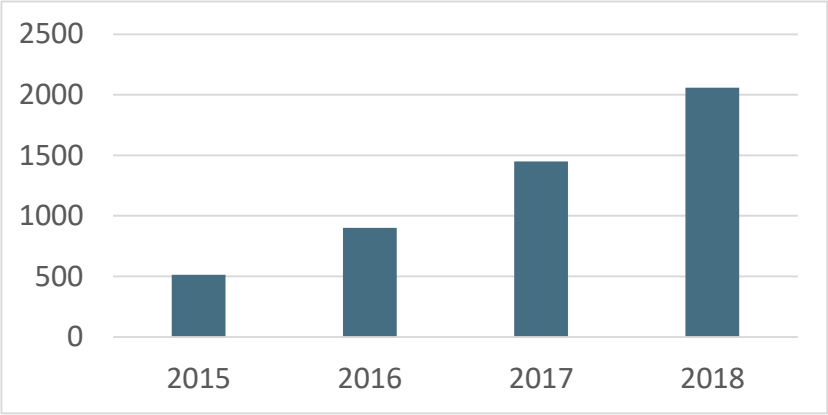
	ComEd's Standard Fixed-Price Rate[1]	ComEd's Hourly Pricing Program[2]
Average Cost per kWh[4]	7.08 cents	5.26 cents
Total Annual Electricity Supply Cost Including EV Charging	$828.48	**$615.54**

1 ComEd's average summer and non-summer fixed-price rate June 2017 – May 2018. The Hourly Pricing rate used in this table includes Capacity Charge.
2 Average cost per kWh between 1 a.m. and 5 a.m. on the Hourly Pricing program in 2017.
3 The average ComEd single family non-space heating customer used 8,578 kWh in 2017 and had an average Capacity Obligation of 3.51 kW.
4 Average cost per kWh based on EV charging 1 a.m. to 5 a.m.

V. Electric Vehicle Owner Participants

Electric vehicles are no longer exclusively seen as high-priced, low-range cars that fit the lifestyle of only the most eco-conscious consumers. These vehicles are becoming more available, popular, and accessible. As EV adoption increases, the number of EV owners participating in hourly rate options is also increasing. As of October 22, 2018, there were a total of 1,865 households with electric vehicles enrolled in ComEd's Hourly Pricing and 194 accounts with EVs on Ameren Illinois Power Smart Pricing, including more than 25 households with more than one EV. These represent year-over-year increases of 35% for Power Smart Pricing and 33% for Hourly Pricing. As Figure 4 shows, this is not a new trend; the number EV owners taking advantage of hourly electric rates has been steadily increasing over the past few years.

Figure 4: Number of EV Owners on Power Smart Pricing and Hourly Pricing by Year



EV owners on hourly electric rates often share their experience with these hourly electric rates. 42% of Hourly Pricing EV owners and 14% of Power Smart EV owners heard about the program through word-of-mouth and other referral marketing channels.

"Our vehicle's onboard timer is set for midnight every day, when the cost of electricity is lowest. Most times we pay next to nothing to fully charge our car."

Mike M., Hourly Pricing participant, saved over $1,600

"I like it and was important in helping to make my decision to go all electric."

Charles V.V., Power Smart Pricing participant since 2011

VI. Conclusion

For more than ten years, Illinois electric vehicle owners have shown that variable electric rates from Ameren and ComEd are an important part of owning an EV. Variable rates can provide electric vehicle owners with benefits including reduced charging costs when vehicles are charged during off-peak hours and will therefore be an important component in the years to come.

Respectfully Submitted,

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